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FOREST INSECT SURVEY

LASSEN VOLCANIC NATIONAL PARK

Season of 1947

SUBJECT--

By

Ralph C. Hall

Forest Insect Laboratory
341 Giannini Hall, U. C.
Berkeley 4, California

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U. S. DEPARTMENT OF AGRICULTURE
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FOREST INSECT INVESTIGATIONS

FOREST INSECT SURVEY
LAUREN VOLCANIC NATIONAL PARK, CALIFORNIA
SEASON OF 1947

Approved by:

John E. Patterson
John E. Patterson, Acting in Charge

Submitted by:

R. C. Hall
Entomologist - R. C. Hall

Forest Insect Laboratory
341 Giannini Hall, U. C.
Berkeley 4, California

FOREST INSECT SURVEY, LASSEN VOLCANIC NATIONAL PARK

Season of 1947

The annual forest insect survey of the Lassen Volcanic National Park was conducted by Ralph C. Hall, of the Berkeley Forest Insect Laboratory, in cooperation with Ranger John Rutter of the National Park Service late in September and early in October. This survey was conducted on a reconnaissance basis and covered an examination of the areas adjacent to the Loop highway, Warner Valley, Butte Lake, Badger Flat, Twin Lakes, Lost Creek, and Manzanita Lake. The Juniper Lake and the Snag Lake areas were not visited.

Results of the 1947 Survey

The 1947 survey showed that the general level of infestation in the Park was endemic except for a few local areas where epidemic tendencies were being shown. The maintenance control work against the Jeffrey pine beetle, Dendroctonus jeffreyi, Hopk., in Jeffrey pine and the western pine beetle, Dendroctonus brevicomis, Lec., in ponderosa pine which was carried on in the Manzanita and Butte Lake areas appears to have kept the infestation in check, and losses in these two species are expected to be considerably less in 1947 than they were in 1946. Maintenance control in the Lost Creek area does not appear to have altered the infestation conditions much in 1947, and little change in loss is expected in this area. Considerable top killing in Jeffrey and ponderosa pine, by what appears to be the California five-spined engraver beetle, Ips confusus, Lec., was found scattered over this area, with some concentration adjacent to the old Lost Creek CC Camp.

Losses in lodgepole pine, caused by the mountain pine beetle, Dendroctonus monticolai, Hopk., are epidemic in and around the Badger Flat area. Several large groups were killed in this area in 1946, and the indications are that many more groups will have been killed in 1947. Losses in lodgepole in the other areas visited were found to be generally endemic.

Losses in red and white fir along the Loop highway appear to be higher than for the 1946 season but are still endemic.

The needle blight on Jeffrey pine in the Manzanita Lake area continues to be serious and there is some indication that this organism is directly contributing to death in certain trees on the poorer sites. Mistletoe damage in fir continues to be serious along the Loop highway between Hat Lake and Summit Lake. This factor contributes to an unsightly appearance in the infested trees as well as making such trees more susceptible to attack by tree-killing insects.

Recommendations for Control

Maintenance control by cut-peel-burn methods is recommended for the pine and mixed conifer types in the Lost Creek, Manzanita Lake and Butte Lake areas. In the maintenance control work, it is suggested that all wind-thrown or broken tops of trees be treated to reduce Ips populations by destroying favorable breeding material for their development.

An experimental control project is also recommended for the local epidemic in lodgepole pine in the Badger Flat area to attempt to prevent the spread of the mountain pine beetle into more extensive stands.

It is suggested that control in this area include the lodgepole pine type beginning just east of Soap Lake in section 13 and extending west to approximately the quarter section corner between sections 9-10, T. 31 N. R. 5 E. (See map.) It is suggested that solar heat treatment be used for the control of this infestation in areas where the stand is open; in areas of dense cover, DDT sprays are the suggested control.